

Determination of Public Land (Rangeland) Health for 64068 ZUBI DRAW

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for the implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on the assessments, it is my determination that the public land within Zubi Draw allotment #64068 meets the Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered and Special Status Species standard. There are no public land Riparian areas on this allotment, therefore this standard was not addressed.

/s/

Assistant Field Manager

Date

Standards of Public Land Health

Evaluation of 64068 ZUBI DRAW Allotment

[02/27/2004]

The Roswell Field Office conducted rangeland health assessments at five (5) study sites within the Zubi Draw Allotment #64068. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
64068-MADE TANK-F056	X			X			N/A		
64068- MEXICAN- F055	X			X			N/A		
64068-ROCK TANK-F054	X			X			N/A		
64068-SOUTH TRAP-F057	X			X			N/A		
64068- SULFUR-F058	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for the public land on Zubi Draw, allotment #64068. Ten of these assessed soil site stability, 11 hydrologic function and 13 biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous monitoring data collected on 5 range trend plot locations within the allotment were utilized to make rangeland health determinations. Quantitative evaluations are performed by the Roswell Field Office, which include some or all of the following: ground and vegetative cover and composition, production, frequency and ecological condition. These collections which were initiated in the late 1970's/early 1980's are scheduled and conducted approximately every 5 years.

The dry conditions occurring over the last several years have impacted this allotment and surrounding area. Five study areas were assessed on this allotment, each one corresponding to a different pasture. Both Made Tank and Mexican Pastures are SD-3 Shallow ecological sites with a Tencee-Upton soil complex, encompassing approximately

1066 acres/485 hectares and 879 acres/400 hectares respectively. These mapping units are on gently rolling soil occurring on upland ridges west of the Pecos River with 0-9% slopes. Made Tank Pasture rated the majority of indicators None to Slight to Slight to Moderate. Bareground however rates Moderate and was estimated at 60% which slightly exceeds the long-term average of 52% and approaches the upper end of the range expected. Functional/structural groups also rates Moderate with the grama (*Bouteloua* spp.) grass component missing. This site historically doesn't possess a shrub component with the exception of snakeweed (*Gutierrezia sarothrae*). This half-shrub cycles in and out of this pasture and is consistently observed and its' presence recorded. Creosote (*Larrea tridentata*) can be seen at the far fringes of this pasture and encroachment is not likely in the near future. The invasive plants indicator as a result rates Moderate due to the scattering of snakeweed. Annual production rates Moderate as approximately 1/2 of the potential forage was produced. Long-term averages 300 lbs/ac or kg/ha. but with the drought taking its toll on the vegetation, the site has been hindered. The mulch layer is practically missing with the amount of small and large rock cover, as evidenced by the gravelly inclusion at the immediate trend plot location. This microenvironment for propagule establishment is compromised. A physical crusting is in place with some breaks in continuity. No livestock were observed utilizing this pasture.

Mexican Pasture rated a number of indicators Moderate. These were; water flow patterns for this area were connected and some instability and deposition was observed; pedestals and/or terracettes with slight active pedestaling on tobosa (*Pleuraphis mutica*) clumps which have become decadent in some places; bareground with estimations currently at 70% which is on the border of exceeding the upper end of the range expected; functional/structural groups with dominance of the grama grasses being replaced by tobosa and burrograss (*Scleropogon brevifolius*); plant mortality and decadence with 30-40% of present vegetation dead which is a distinct possibility of drought influences; litter amount now estimated at 10% but lower than the long-term average of 18%, and a range between 6 and 33%; annual production at 200 lbs/ac or kg/ha. which is 1/2 of the long-term average and ESD potential; invasive plants with creosote scattered especially on the upland portion of this pasture. Reproductive capability of perennial plants is only slightly limited but there are some large bare patches evident that are held together by a fairly uniform physical and biological crust. The drainages leading to and from this site are well vegetated considering the smattering of oil, gas and mineral operations taking place. All other indicators rated None to Slight to Slight to Moderate.

Rock Tank Pasture was the only pasture with significant livestock use. The drinker was placed at the bottom of the existing drainage, but the congregation of livestock is not at the drinker, but rather well distributed throughout the pasture. As expected the water flow patterns were slightly connected with minor erosion taking place. This indicator rates Moderate along with bareground now estimated at 60%. For a loamy site, a reading of 40-50% is expected for the ESD. Both the current and ESD readings exceed the long-term average of 43%. Functional/structural groups also rates Moderate with the grama grasses missing as well as the forb component. Desert holly (*Perezia nana*) is the only forb onsite along with the shrubs, yucca (*Yucca* spp.), cholla (*Opuntia spinosa*) and snakeweed. The departure from the ESD is seen with a reduction in tobosa, burrograss

and threeawn (*Aristida* spp.). These grasses are reduced in the upland region from the drainage but are slightly more abundant in the drainage and downslope with greater gravel cover. Litter amount show indications of creating a mulch layer, with standing biomass as well, suggesting that the conservative use by livestock is helping this site recover from the recent dry conditions. This indicator rates Moderate with the amount at the bottom end of the range expected for a loamy site. Annual production also rates Moderate with approximately 60% of the potential for the ESD and 1/2 of the long-term average. Yucca and snakeweed are growing on the shallow inclusions and rates Moderate for invasive plants. There is significant gullying occurring on the road leading into the pasture and is need of some maintenance before it impacts the soil and hydrological processes at the site. Vegetation is however attempting to establish on the banks but may not remain if the gullying process is allowed to continue and headcuts and nickpoints become active as a result of vehicle travel and little or no maintenance.

South Trap Pasture rated most of the indicators None to Slight to Slight to Moderate with the exception of functional/structural groups and litter amount. Creosote and yucca are beginning to encroach from the adjacent upland. The grasses blue grama (*Bouteloua gracilis*) and black grama (*Bouteloua eriopoda*) are missing which are most noteworthy. Tobosa however continues to dominate but not as strongly as before. The diversity of vegetation remains with slight reductions in most species. Litter amount is below that expected. Long-term averages of 27% falls within the expected range and the current estimation of 10-20% approaches the lower end of the range expected. Some litter movement is observed, but is not traveling far from it's origin. The bulk of production remains tobosa and small amounts of sideoats grama (*Bouteloua curtipendula*). Cattle trailing through the area is of concern , but the reduced stocking rate by the allottee may alleviate this problem. The compaction layer at 5-10% weakly restricts water movement but not so much root penetration. This indicator with all three attributes for site protection rates Slight to Moderate. The gentle topography and prudent utilizations levels by the allottee on the pasture and surrounding area keeps the soil and mulching processes in line for site protection. Physical and biological crusts are observed and holding the topsoil in place despite the disturbances from the road and cattle trailing.

Sulfur Pasture has consistently been the pasture with the best ecological condition according to the long-term monitoring studies. Located on a state and public land section, this site remains in good condition from an ocular standpoint with a few Moderate deviations. Bareground as with most sites on the allotment rates Moderate with an estimation of 60% approaching the upper end of the range expected. The bottoms are in good shape and show very little evidence of gullying. This site is mostly void of browse species and a reduced forb component. Wolfberry (*Lycurus* spp.) is the shrub that can be observed in a few isolated pockets with scattered cholla and snakeweed. As a result the functional/structural groups and invasive plants indicator both rate Moderate. Tobosa and burrograss remain onsite however, but in lesser amounts. Litter amount rates Moderate with an estimation of 10-20%. This is to be expected with the reduction in production at current estimations of 300 lbs/ac or kg/ha. of annual growth long-term averages of 765 lbs/ac or kg/ha. Only slight limitations in reproductive capability can be seen considering the recent dry conditions. Seed and tiller formation can be observed on most grass plants.

Creosote is also observed here on the the more shallow uplands of this pasture but do not figure to encroach on this more loamy bottomland area.

Hydrology - Pasture Made Tank - The rills, water flow patterns, pedestals and/or terracettes, bareground, gullies, wind-scoured, blowouts and or depositional areas, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount and physical/chemical/biological crusts indicators have rated as none to slight or slight to moderate. Sand and gravel deposits of Quaternary alluvial, terrace and limestone in the San Andres Formation outcrop in the area.

Pasture Mexican - The water flow patterns indicator rated as moderate. Erosion is occurring with some instability and deposition. The pedestals and/or terracette indicator rated as moderate. The recent dry conditions in combination with wind and water erosion has possibly decreased the amount of plant cover and possibly decreased infiltration into the soil which may have increased the amount of pedestaling of plants and rocks. The bareground indicator rated as moderate. The amount of bareground has possibly increased due to recent dry conditions and also wind and water erosion processes. The litter amount rated in the moderate category. The decrease in litter amount suggests that the dry conditions have had a negative affect on the growing conditions which decreases the amount of litter that is produced. Additionally, the decrease in litter amount can have the effect of increasing the amount of bare soil. All other indicators rated as none to slight or slight to moderate. Sand and gravel deposits of Quaternary alluvial and pediment outcrop in the area.

Pasture Rock Tank - The bareground indicator rated as moderate. The amount of bareground has possibly increased due to recent dry conditions and also wind and water erosion processes. The litter amount rated in the moderate category. The decrease in litter amount suggests that the dry conditions have had a negative affect on the growing conditions which decreases the amount of litter that is produced. Additionally, the decrease in litter amount can have the effect of increasing the amount of bare soil. All other indicators rated as none to slight or slight to moderate. Sand and gravel deposits of Quaternary alluvial outcrop in the area.

Pasture South Trap - The litter amount rated in the moderate category. The decrease in litter amount suggests that the dry conditions have had a negative affect on the growing conditions which decreases the amount of litter that is produced. All other indicators rated as none to slight or slight to moderate. Sand and gravel deposits of Quaternary alluvial outcrop in the area.

Pasture Sulfur - The bareground indicator rated as moderate. The amount of bareground has possibly increased due to recent dry conditions and also wind and water erosion processes. The litter amount rated in the moderate category. The decrease in litter amount suggests that the dry conditions have had a negative affect on the growing conditions which decreases the amount of litter that is produced. Additionally, the decrease in litter amount can have the effect of increasing the amount of bare soil. All other indicators

rated as none to slight or slight to moderate. Sand and gravel deposits of Quaternary alluvial outcrop in the area.

Wildlife/biotic - Evaluation of the integrity of the biotic community considered several indicators as attribute indices for the areas of interest. Biotic indicators are interrelated with several others, including soil/site stability, hydrologic function, and vegetation. Several indicators are singularly biotic and address the vegetative aspect of the ecological site description, such as functional/structural groups and plant mortality and decadence, as discussed above. In addition to the standard worksheet biotic factors, four specific wildlife indicators and descriptors are included in these evaluations.

Sulfur and Rock Tank Pastures - The only biotic factors that fell within the Moderate rating are functional/structural groups, litter amount, annual production and invasive plants. South Trap, Made Tank and Mexican Pastures also rate functional/structural groups Moderate with similar deviations for annual production and litter amount. Snakeweed was the one invasive shrub of concern for Made Tank pasture with scatterings throughout. Considering present climatic regimes, these indicators can be expected to fall within the normal range of variability. As these areas of interest fall within an ecotone between the Chihuahuan desert and grassland biomes, the desert shrub component can be expected in the area and would increase with declining range site conditions and the overall drying conditions over time.

Wildlife habitat and Population indicators rate Slight to Moderate, primarily for pronghorn (*Antilocapra americana*), desert mule deer (*Odocoileus hemionus*), upland game birds, and a variety on non-game terrestrial species. The composition of vegetation reflects current climatic conditions, e.g., drought for the past several years and the area being within an ecotone of the Chihuahuan desert and grasslands. Range site production and cover of a variety of preferred plant species for wildlife, such as forbs and woody browse species, and the availability of seed for food and plant regeneration, is moderated by climate and land use. These food and cover habitat components appear to be in very good condition, coupled with the presence of water in depressions and swales. Non-grazing of particular pastures following the early spring storms has enhanced rangeland conditions. With respect to Special Status Species, none are known to occur in the area of interest at this time and the Habitat and Population indicators are, therefore, rated None to Slight.

It is the professional opinion of the Assessment Team that the public land within the Zubi Draw allotment meets the Upland and Biotic standards. There are no Riparian issues present, therefore this standard was not addressed. See site notes and recommendations for further information regarding the assessments on these ecological sites.

Recommendations: Monitoring should continue as well as rotational grazing schemes by the allottee. Mexican pasture may need further ground truthing to confirm it's shallow ecological site status. According to the soil mapping, delineations may warrant it to be in a transition zone between loamy and shallow. The vegetation suggests it possesses more loamy characteristics than shallow however. The access road leading into Rock Tank

pasture needs immediate maintenance or it will surely become a gully with further resource damage occurring.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64068-MADE TANK-F056			
Legal Land Desc	NESW 5 0140S 0230E Meridian 23	Acreage	2290
Ecosite	042CY025NM SHALLOW SD-3	Photo Taken	N
Watershed	13060009040 FELIX		
Observers	NAVARRO/BAGGAO	Observation Date	02/26/2004
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	Tg	Soil Taxon Name	TENCEE
Texture Class	NM666 GR-L	Soil Phase	TENCEE- UPTON
Texture Modifier	NM666 GRAVELLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	7.92	NOAA Growing Season Precipitation	4.91
NOAA Avg Annual Precipitation	12.98	NOAA Avg Growing Season Precipitation	10.78
Disturbances and Animal Use:			

Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extrem e	Moderat e to Extreme	Moderat e	Slight to Moderat e	None to Slight
S H	Rills					X
Comments :						
S H	Water Flow Patterns				X	
Comments :						
S H	Pedestals and/or Terracettes				X	
Comments :						

S H	Bare Ground				X	
Comments :						
S H	Gullies					X
Comments :						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments :						
H	Litter Movement					X
Comments :						
S H B	Soil Surface Resistance to Erosion				X	
Comments :						
S H B	Soil Surface Loss or Degradation				X	
Comments :						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments :						
S H B	Compaction Layer					X
Comments :						
B	Functional/Structural Groups			X		
Comments :	Absence of gramas.					
B	Plant Mortality/Decadence					X
Comments :						
H B	Litter Amount				X	
Comments :						

B	Annual Production			X		
Comments :	1/2 of average production.					
B	Invasive Plants			X		
Comments :	Mostly snakeweed.					
B	Reproductive Capability of Perennial Plants				X	
Comments :						
S	Physical/Chemical/Biological Crusts				X	
Comments :	Physical crusts evident.					
B	Wildlife Habitat				X	
Comments :						
B	Wildlife Populations				X	
Comments :						
B	Special Status Species Habitat					X
Comments :	None known to occur.					
B	Special Status Species Populations					X
Comments :	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	6	4
H	Hydrologic	0	0	0	7	4

B	Biotic	0	0	3	6	4
<p>B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i>, and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.</p>						
Attribute	Rationale	Does Not Meet	May Need More Info	Meets		
Soil		0	0	10		
Hydrologic		0	0	11		
Biotic		0	3	10		
<p>Site Notes: This site appears be a gravelly inclusion. Photos taken of the northern reach of the transects. The grammas are dropping out of the loamy and shallow. Snakeweed, creosote and rocks are widely distributed. Compare to loamy-drainages which are well vegetated.</p>						

RFOs Upland and Biotic Standard Assessment Summary Worksheet						
SITE 64068-MEXICAN-F055						
Legal Land Desc	SESE 3 0140S 0230E Meridian 23		Acreage		685	
Ecosite	042CY025NM SHALLOW SD-3		Photo Taken		N	
Watershed	13060009040 FELIX					
Observers	NAVARRO/BAGGAO		Observation Date		02/27/2004	
County Soil Survey	NM666 CHAVES SOUTH		Soil Var/Taxad			
Soil Map Unit	Tg		Soil Taxon Name		TENCEE	
Texture Class	NM666 GR-L		Soil Phase		TENCEE- UPTON	
Texture Modifier	NM666 GRAVELLY LOAM					
Observed Avg Annual Precipitation			Observed Avg Growing Season Precipitation			
NOAA Annual Precipitation	7.92		NOAA Growing Season Precipitation		4.91	
NOAA Avg Annual Precipitation	12.98		NOAA Avg Growing Season Precipitation		10.78	
Disturbances and Animal Use:						
Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extrem e	Moderat e to Extreme	Moderat e	Slight to Moderat e	None to Slight
S H	Rills					X
Comments :						
S H	Water Flow Patterns			X		
Comments :	Connected in some parts.					
S H	Pedestals and/or Terracettes			X		
Comments	Pedestals on tobosa plants.					

:						
S H	Bare Ground			X		
Comments :	70% is the current estimate approaching the upper end of the range expected.					
S H	Gullies					X
Comments :	Drainages well vegetated.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments :	Exposure to wind.					
H	Litter Movement				X	
Comments :	Very little litter.					
S H B	Soil Surface Resistance to Erosion				X	
Comments :						
S H B	Soil Surface Loss or Degradation				X	
Comments :	Some A-horizon lost.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments :						
S H B	Compaction Layer					X
Comments :						
B	Functional/Structural Groups			X		
Comments :	Blue and black grama out; replaced by tobosa and burrograss.					
B	Plant Mortality/Decadence				X	
Comments :	Dry conditions are causing this indicator to read high.					
H B	Litter Amount			X		
Comments	Now only estimated at 10%.					

:						
B	Annual Production			X		
Comments :	Only 1/2 of long-term average and well below ESD.					
B	Invasive Plants			X		
Comments :	Creosote only scattered.					
B	Reproductive Capability of Perennial Plants				X	
Comments :	Slight affects.					
S	Physical/Chemical/Biological Crusts				X	
Comments :	Uniform crusts of biological and physical.					
B	Wildlife Habitat				X	
Comments :						
B	Wildlife Populations				X	
Comments :						
B	Special Status Species Habitat					X
Comments :	None known to occur.					
B	Special Status Species Populations					X
Comments :	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	3	3	4

H	Hydrologic	0	0	4	4	3
B	Biotic	0	0	4	6	3
<p>B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i>, and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.</p>						
Attribute	Rationale	Does Not Meet	May Need More Info	Meets		
Soil		0	3	7		
Hydrologic		0	4	7		
Biotic		0	4	9		
<p>Site Notes: Large bare patches exist onsite. The pasture is the southernmost on the ranch.</p>						

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 64068-ROCK TANK-F054

Legal Land Desc	SENE 34 0130S 0230E Meridian 23	Acreage	924
Ecosite	042CY007NM LOAMY SD-3	Photo Taken	N
Watershed	13060009040 FELIX		
Observers	NAVARRO/BAGGAO	Observation Date	02/27/2004
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	Tg	Soil Taxon Name	TENCEE
Texture Class	NM666 GR-L	Soil Phase	TENCEE-UPTON
Texture Modifier	NM666 GRAVELLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	7.92	NOAA Growing Season Precipitation	4.91
NOAA Avg Annual Precipitation	12.98	NOAA Avg Growing Season Precipitation	10.78
Disturbances and Animal Use:	There is quite a bit of cattle use with approximately 30 mother/calf pairs. The site is well distributed in regards to water and the use is fairly uniform. The road is becoming a gully however.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extrem e	Moderat e to Extreme	Moderat e	Slight to Moderat e	None to Slight
S H	Rills					X
Comments :						
S H	Water Flow Patterns				X	
Comments :						

S H	Pedestals and/or Terracettes				X	
Comments :	Plenty of plants are on the verge of becoming pedestaled.					
S H	Bare Ground			X		
Comments :	Now 60-70% is the estimate.					
S H	Gullies				X	
Comments :	Vegetation is stabilizing the area, however the road leading into the pasture is becoming a gully itself.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments :						
H	Litter Movement				X	
Comments :						
S H B	Soil Surface Resistance to Erosion				X	
Comments :	Organic matter					
S H B	Soil Surface Loss or Degradation				X	
Comments :						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments :						
S H B	Compaction Layer					X
Comments :	On roads.					
B	Functional/Structural Groups			X		
Comments :	The forbs component is missing.					
B	Plant Mortality/Decadence				X	
Comments :	10% is the amount of current decadence.					

H B	Litter Amount			X		
Comments :	Estimation is now at 15%.					
B	Annual Production			X		
Comments :	60% of potential.					
B	Invasive Plants			X		
Comments :	Yucca and snakeweed on shallow inclusions.					
B	Reproductive Capability of Perennial Plants				X	
Comments :						
S	Physical/Chemical/Biological Crusts				X	
Comments :	Physical crusts evident.					
B	Wildlife Habitat				X	
Comments :						
B	Wildlife Populations				X	
Comments :						
B	Special Status Species Habitat					X
Comments :	None known to occur.					
B	Special Status Species Populations					X
Comments :	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to	Moderate	Slight to Moderate	None to

			Extreme		e	Slight
S	Soil	0	0	1	6	3
H	Hydrologic	0	0	2	7	2
B	Biotic	0	0	4	6	3
<p>B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i>, and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.</p>						
Attribute	Rationale		Does Not Meet		May Need More Info	Meets
Soil			0		1	9
Hydrologic			0		2	9
Biotic			0		4	9
<p>Site Notes: There is cattle use on this pasture. Drinkers are found at the bottom and the small drainages are well vegetated. Access to the site is becoming a gully due to no maintenance. There is plenty of standing litter with more grass than the other sites.</p>						

RFOs Upland and Biotic Standard Assessment Summary Worksheet						
SITE 64068-SOUTH TRAP-F057						
Legal Land Desc	NWSE 21 0130S 0230E Meridian 23		Acreage		656	
Ecosite	042CY007NM LOAMY SD-3		Photo Taken		N	
Watershed	13060007030 ZUBER					
Observers	NAVARRO/BAGGAO		Observation Date		02/27/2004	
County Soil Survey	NM666 CHAVES SOUTH		Soil Var/Taxad			
Soil Map Unit	Tg		Soil Taxon Name		TENCEE	
Texture Class	NM666 GR-L		Soil Phase		TENCEE- UPTON	
Texture Modifier	NM666 GRAVELLY LOAM					
Observed Avg Annual Precipitation			Observed Avg Growing Season Precipitation			
NOAA Annual Precipitation	7.92		NOAA Growing Season Precipitation		4.91	
NOAA Avg Annual Precipitation	12.98		NOAA Avg Growing Season Precipitation		10.78	
Disturbances and Animal Use:						
Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extrem e	Moderat e to Extreme	Moderat e	Slight to Moderat e	None to Slight
S H	Rills					X
Comments :						
S H	Water Flow Patterns				X	
Comments :						
S H	Pedestals and/or Terracettes					X

Comments :						
S H	Bare Ground				X	
Comments :	Now only 1/2 of ESD and long-term average.					
S H	Gullies					X
Comments :						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments :						
H	Litter Movement					X
Comments :	Vegetation intercepts what little litter exists.					
S H B	Soil Surface Resistance to Erosion				X	
Comments :	Stable, not very erodible.					
S H B	Soil Surface Loss or Degradation				X	
Comments :						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments :						
S H B	Compaction Layer					X
Comments :	Some cattle trailing.					
B	Functional/Structural Groups			X		
Comments :	Gramas missing. Tobosa, creoste and sideoats are now currently on site.					
B	Plant Mortality/Decadence				X	
Comments :						
H B	Litter Amount			X		

Comments :	Below expected.					
B	Annual Production				X	
Comments :	50% of expected.					
B	Invasive Plants				X	
Comments :	Yucca scattered.					
B	Reproductive Capability of Perennial Plants				X	
Comments :						
S	Physical/Chemical/Biological Crusts				X	
Comments :	Physical crusting fairly uniform.					
B	Wildlife Habitat				X	
Comments :						
B	Wildlife Populations				X	
Comments :						
B	Special Status Species Habitat					X
Comments :	None known to occur.					
B	Special Status Species Populations					X
Comments :	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight

S	Soil	0	0	0	5	5
H	Hydrologic	0	0	1	4	6
B	Biotic	0	0	2	8	3
<p>B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i>, and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.</p>						
Attribute	Rationale	Does Not Meet	May Need More Info	Meets		
Soil		0	0	10		
Hydrologic		0	1	10		
Biotic		0	2	11		
<p>Site Notes: Gentle topography with some biological crusting.</p>						

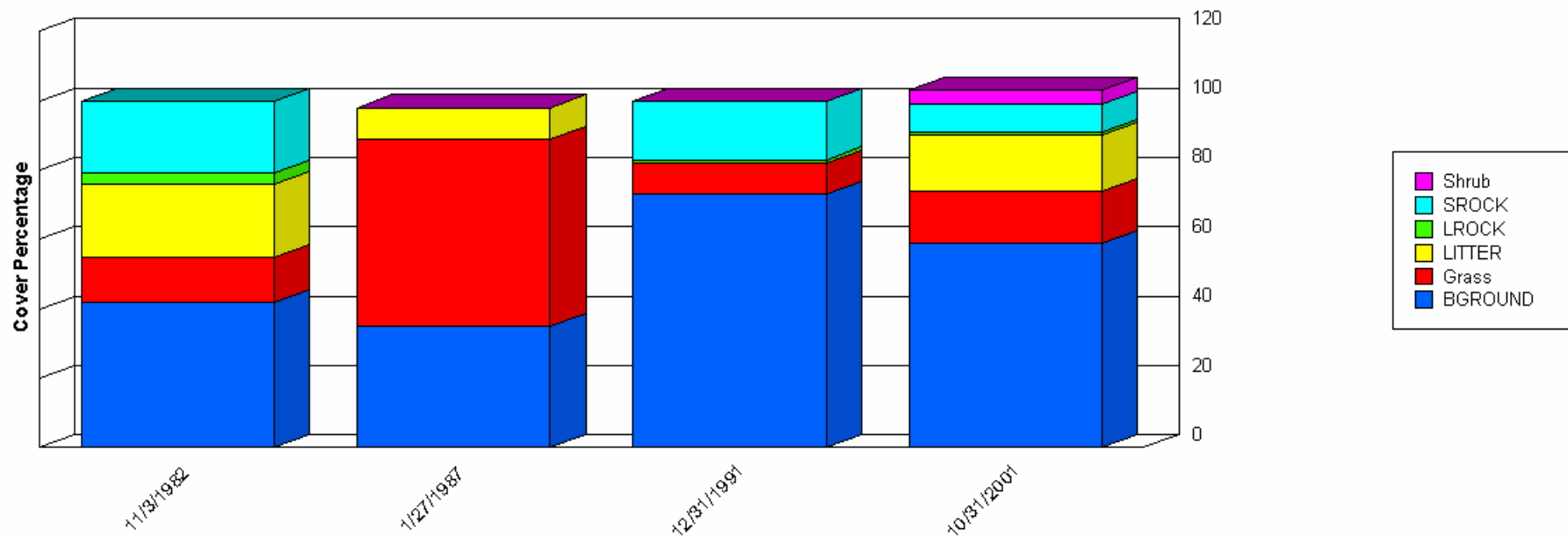
RFOs Upland and Biotic Standard Assessment Summary Worksheet						
SITE 64068-SULFUR-F058						
Legal Land Desc	NWSW 17 0130S 0230E Meridian 23		Acreage		869	
Ecosite	042CY007NM LOAMY SD-3		Photo Taken		N	
Watershed	13060007030 ZUBER					
Observers	NAVARRO/BAGGAO		Observation Date		02/27/2004	
County Soil Survey	NM666 CHAVES SOUTH		Soil Var/Taxad			
Soil Map Unit	UA		Soil Taxon Name		UPTON	
Texture Class	NM666 L		Soil Phase		UPTON-ATOKA	
Texture Modifier	NM666 GRAVELLY LOAM					
Observed Avg Annual Precipitation			Observed Avg Growing Season Precipitation			
NOAA Annual Precipitation	7.92		NOAA Growing Season Precipitation		4.91	
NOAA Avg Annual Precipitation	12.98		NOAA Avg Growing Season Precipitation		10.78	
Disturbances and Animal Use:						
Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments :						
S H	Water Flow Patterns				X	
Comments :						
S H	Pedestals and/or Terracettes				X	

Comments :						
S H	Bare Ground			X		
Comments :	Bareground is currently estimated at 60%.					
S H	Gullies				X	
Comments :	Bottoms not in great shape, but functional.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments :	Water actions, sheet.					
H	Litter Movement				X	
Comments :	Wind and water.					
S H B	Soil Surface Resistance to Erosion				X	
Comments :	Physical crusts are somewhat resistant.					
S H B	Soil Surface Loss or Degradation				X	
Comments :						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments :	Lack of plants, such as browse species.					
S H B	Compaction Layer				X	
Comments :						
B	Functional/Structural Groups			X		
Comments :	There is lack of browse, and very few forb. Wolfberry is found on site.					
B	Plant Mortality/Decadence				X	
Comments :						
H B	Litter Amount			X		

Comments :	10-15% is the current estimate.					
B	Annual Production			X		
Comments :	Only 40% of potential can be observed.					
B	Invasive Plants			X		
Comments :	Cholla is scattered along with snakeweed.					
B	Reproductive Capability of Perennial Plants				X	
Comments :						
S	Physical/Chemical/Biological Crusts				X	
Comments :	Physical crusts are evident.					
B	Wildlife Habitat				X	
Comments :						
B	Wildlife Populations				X	
Comments :						
B	Special Status Species Habitat					X
Comments :	None known to occur.					
B	Special Status Species Populations					X
Comments :	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight

S	Soil	0	0	1	7	2
H	Hydrologic	0	0	2	8	1
B	Biotic	0	0	4	7	2
<p>B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i>, and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.</p>						
Attribute	Rationale	Does Not Meet	May Need More Info	Meets		
Soil		0	1	9		
Hydrologic		0	2	9		
Biotic		0	4	9		
Site Notes:						

Ground Cover Trends



	11/3/1982	1/27/1987	12/31/1991	10/31/2001
BGROUND	42.00	35.00	73.00	59.00
Grass	13.00	54.00	9.00	15.00
LITTER	21.00	9.00	0.00	16.00
LROCK	3.00	0.00	1.00	1.00
Shrub	0.00	0.00	0.00	4.00
SROCK	21.00	0.00	17.00	8.00
Total	100.00	98.00	100.00	103.00

Report Parameters

SITE NAME LIKE	64068-MADE TANK-F056
ON/AFTER	10/01/1982
ON/BEFORE	09/30/2002

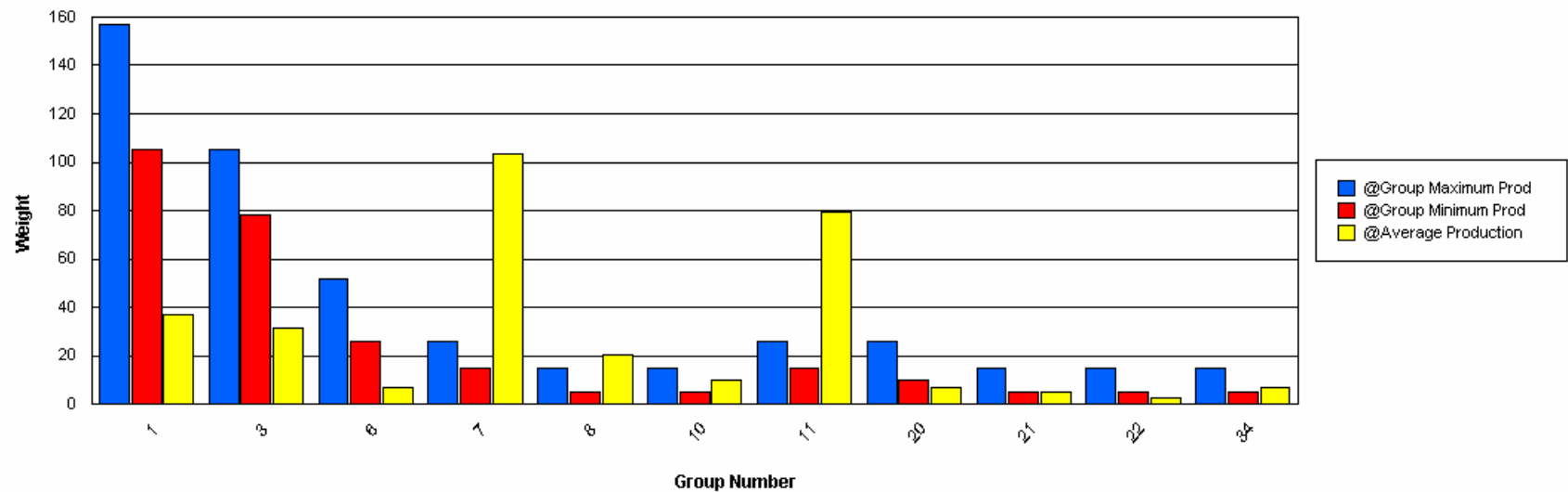
Functional / Structural Groups

Report Parameters

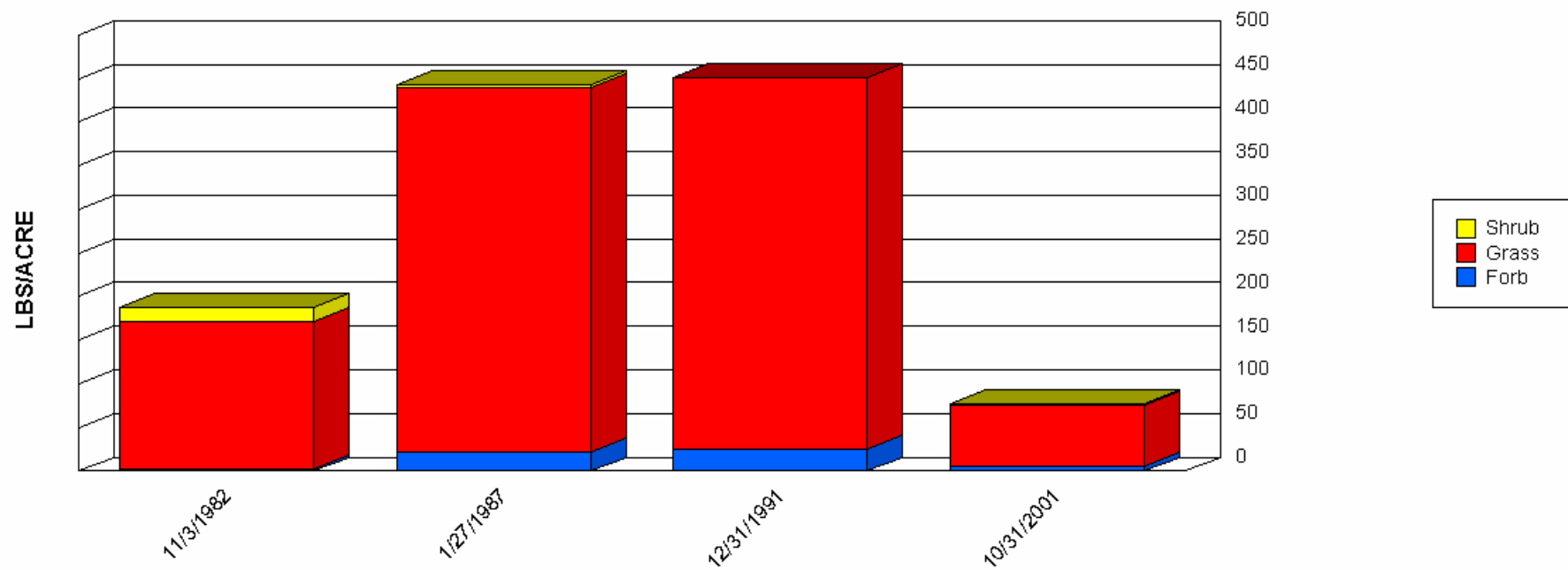
SITE NAME LIKE 64068-MADE TANK-F056
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2002
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 042CY025NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	105	157	22.54	66.00	37.07	17.32
3	Grass	BOGR2	78	105	0.00	99.00	31.19	39.54
6	Grass	SPCR	26	52	0.00	12.29	7.10	5.19
7	Grass	TRMU	15	26	0.00	75.00	48.88	29.32
7	Grass	TRPI2	15	26	0.00	123.33	54.78	51.28
8	Grass	MUAR	5	15	7.00	54.00	20.65	19.39
10	Grass	ERPU8	5	15	0.00	17.97	10.26	6.71
11	Grass	ARIST	15	26	2.13	64.03	19.43	25.89
11	Grass	HIMU2	15	26	9.00	39.48	24.89	11.57
11	Grass	MUAR2	15	26	0.00	38.80	13.99	17.59
11	Grass	SCBR2	15	26	0.93	50.00	21.18	19.94
12	Grass	TRAGU	0	5	0.00	0.59	0.20	0.28
14	Grass	PAHA	5	15	0.00	1.19	0.40	0.56
20	Forb	CROTO	10	26	0.00	18.00	7.16	7.40
21	Forb	AAFF	5	15	0.00	8.10	5.03	3.59
22	Forb	HOGL2	5	15	0.00	1.83	0.61	0.86
22	Forb	PPFF	5	15	0.00	3.24	1.62	1.62
22	Forb	SOLAN	5	15	0.00	0.37	0.12	0.17
34	Shrub	GUSA2	5	15	1.12	16.10	6.95	6.55

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
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Production Lbs/Acre Trends

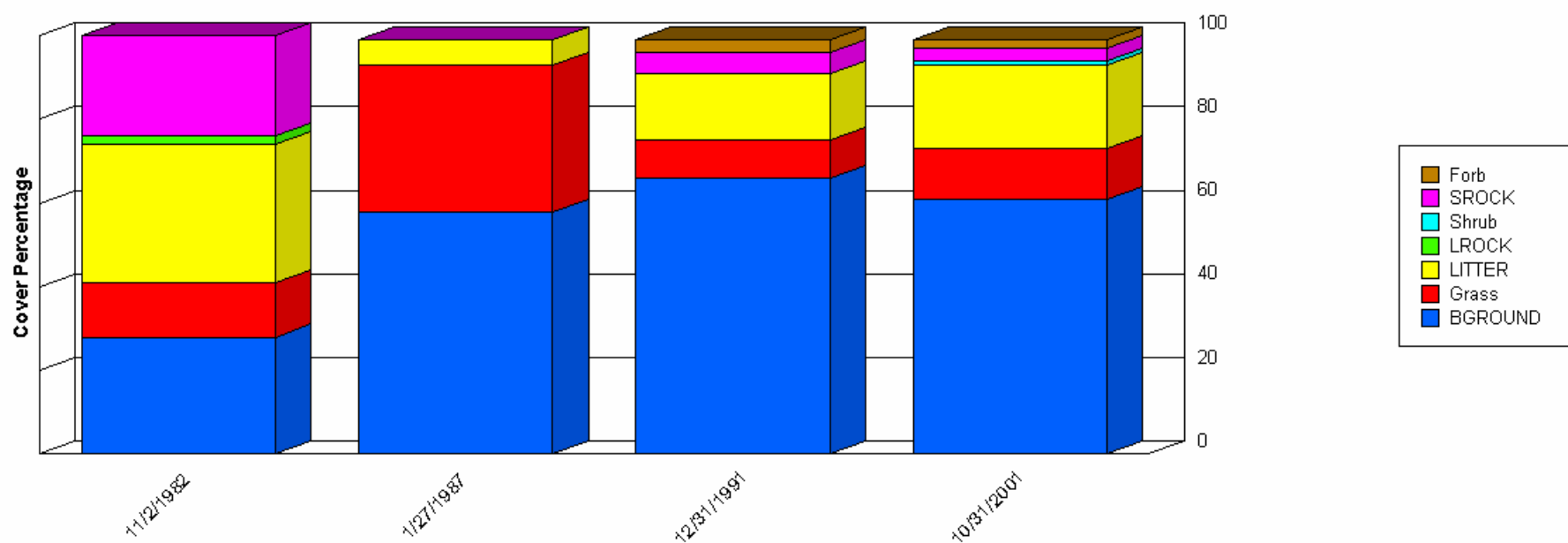


	11/3/1982	1/27/1987	12/31/1991	10/31/2001
Forb	2.85	21.34	25.00	5.37
Grass	168.13	418.71	426.00	70.69
Shrub	16.10	3.64	0.00	1.12
Total	187.08	443.69	451.00	77.17

Report Parameters

SITE NAME LIKE 64068-MADE TANK-F056
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2002

Ground Cover Trends



	11/2/1982	1/27/1987	12/31/1991	10/31/2001
BGROUND	28.00	58.00	66.00	61.00
Forb	0.00	0.00	3.00	2.00
Grass	13.00	35.00	9.00	12.00
LITTER	33.00	6.00	16.00	20.00
LROCK	2.00	0.00	0.00	0.00
Shrub	0.00	0.00	0.00	1.00
SROCK	24.00	0.00	5.00	3.00

	11/2/1982	1/27/1987	12/31/1991	10/31/2001
Total	100.00	99.00	99.00	99.00

Report Parameters

SITE NAME LIKE 64068-MEXICAN-F055
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2002

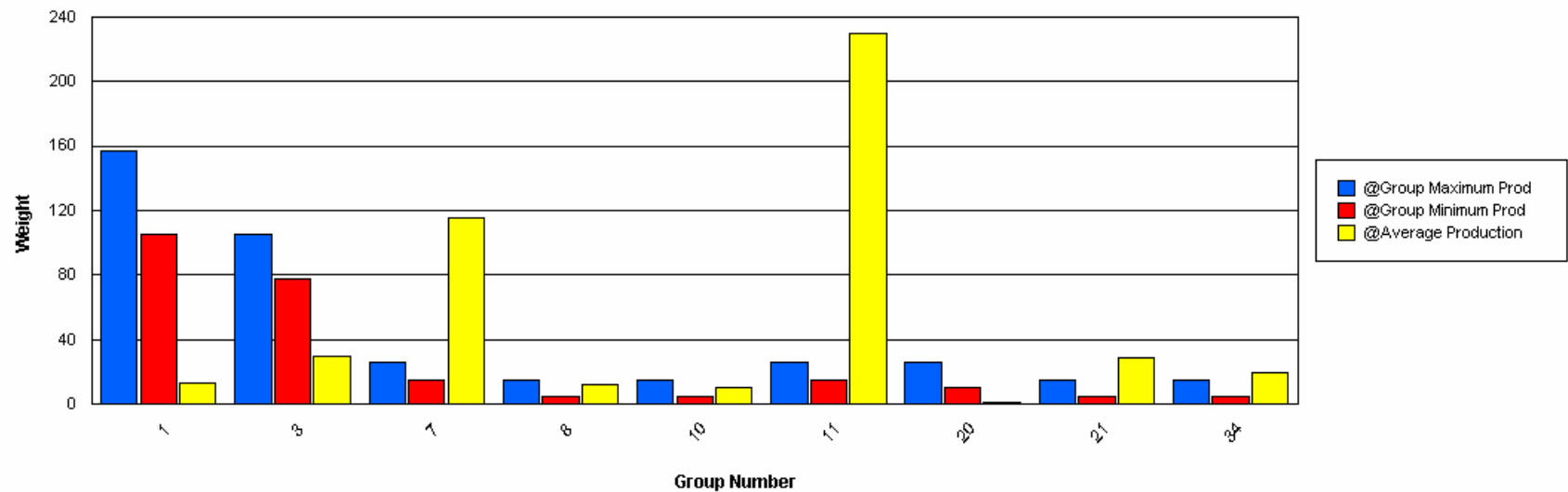
Functional / Structural Groups

Report Parameters

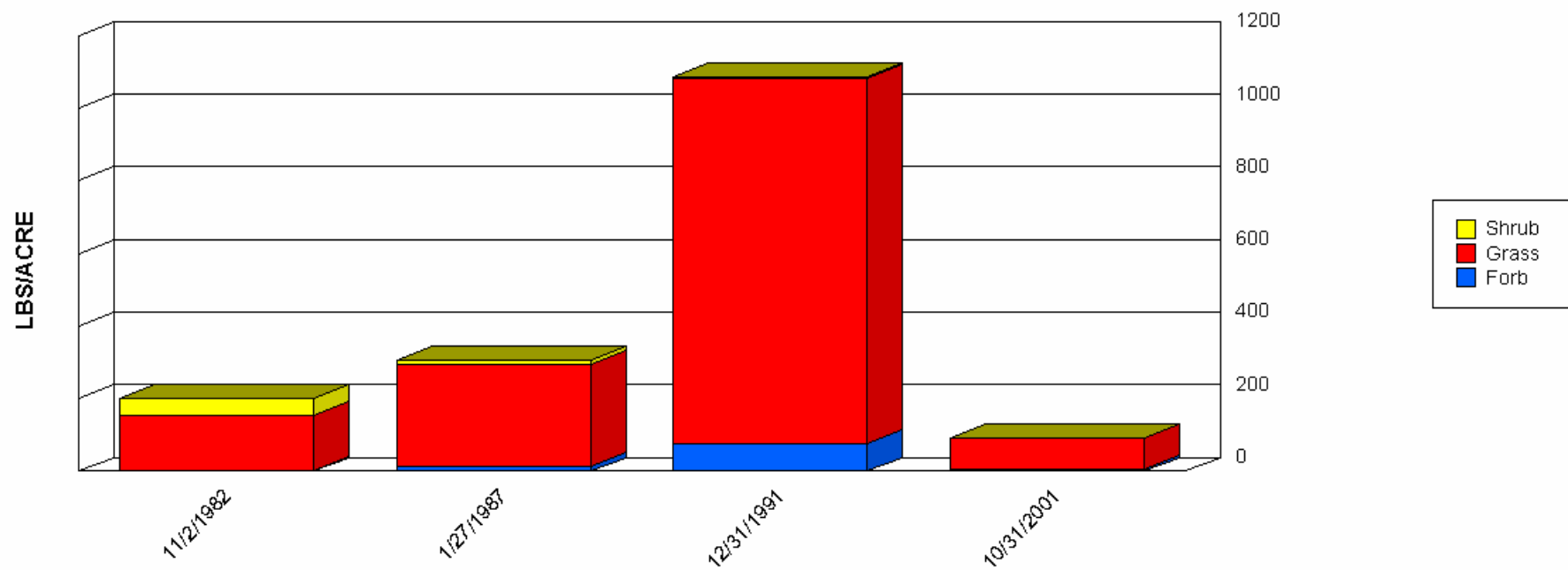
SITE NAME LIKE 64068-MEXICAN-F055
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2002
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 042CY025NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	105	157	1.38	31.00	13.07	10.98
3	Grass	BOGR2	78	105	0.00	84.00	29.56	38.55
7	Grass	TRMU	15	26	0.00	53.94	28.34	22.70
7	Grass	TRPI2	15	26	10.71	142.00	87.24	55.77
8	Grass	MUAR	5	15	0.47	31.00	12.66	11.39
10	Grass	ERPU8	5	15	1.33	20.00	9.93	7.41
11	Grass	ARIST	15	26	1.03	9.80	5.41	4.39
11	Grass	HIMU2	15	26	15.84	612.00	178.90	250.62
11	Grass	MUAR2	15	26	0.00	5.82	3.52	2.53
11	Grass	SCBR2	15	26	20.91	64.00	42.20	15.24
17	Forb	SPHAE	5	15	0.00	0.54	0.27	0.27
20	Forb	CROTO	10	26	0.00	4.00	1.44	1.81
21	Forb	AAFF	5	15	0.86	76.00	29.22	33.33
22	Forb	ERTE13	5	15	0.00	1.83	0.61	0.86
25	Shrub	LADI2	5	15	0.00	2.75	0.92	1.30
34	Shrub	GUSA2	5	15	0.75	46.00	19.42	19.30
36	Shrub	DALEA	5	15	0.00	0.39	0.13	0.19

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
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Production Lbs/Acre Trends

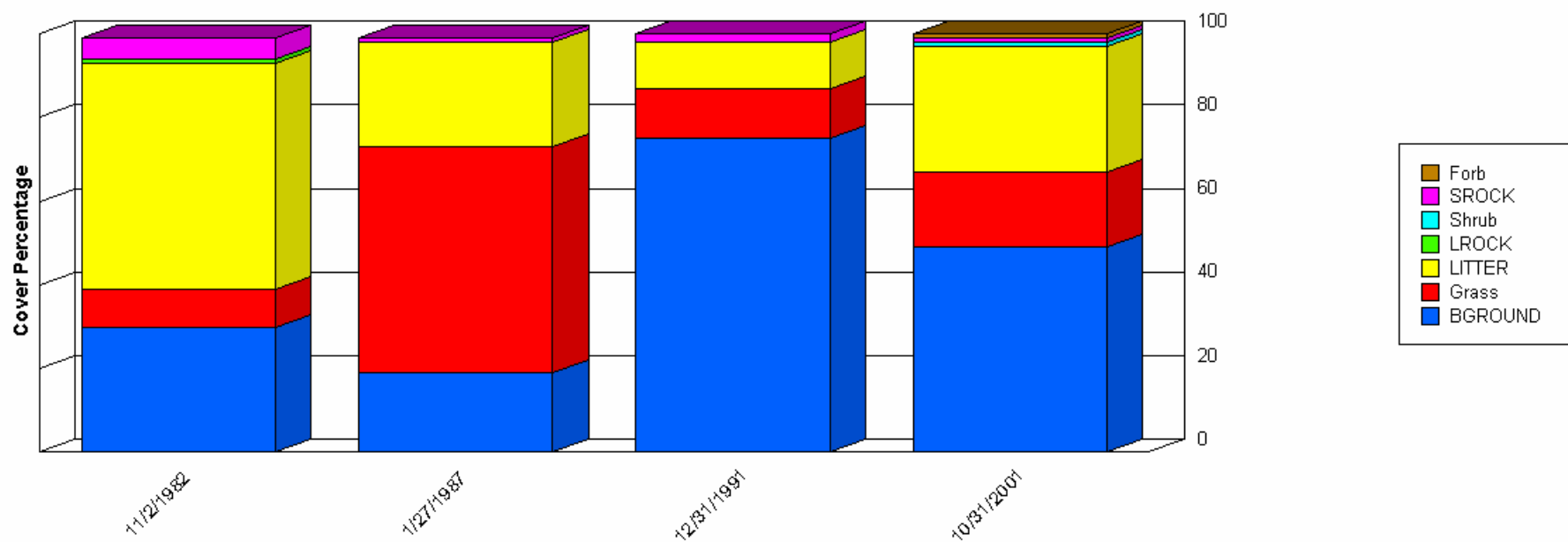


	11/2/1982	1/27/1987	12/31/1991	10/31/2001
Forb	2.16	15.34	76.00	6.93
Grass	150.28	279.04	1,005.00	84.81
Shrub	49.15	11.53	7.00	0.75
Total	201.59	305.91	1,088.00	92.49

Report Parameters

SITE NAME LIKE 64068-MEXICAN-F055
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2002

Ground Cover Trends



	11/2/1982	1/27/1987	12/31/1991	10/31/2001
BGROUND	30.00	19.00	75.00	49.00
Forb	0.00	0.00	0.00	1.00
Grass	9.00	54.00	12.00	18.00
LITTER	54.00	25.00	11.00	30.00
LROCK	1.00	0.00	0.00	0.00
Shrub	0.00	0.00	0.00	1.00
SROCK	5.00	1.00	2.00	1.00

	11/2/1982	1/27/1987	12/31/1991	10/31/2001
Total	99.00	99.00	100.00	100.00

Report Parameters

SITE NAME LIKE 64068-ROCK TANK-F054
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2002

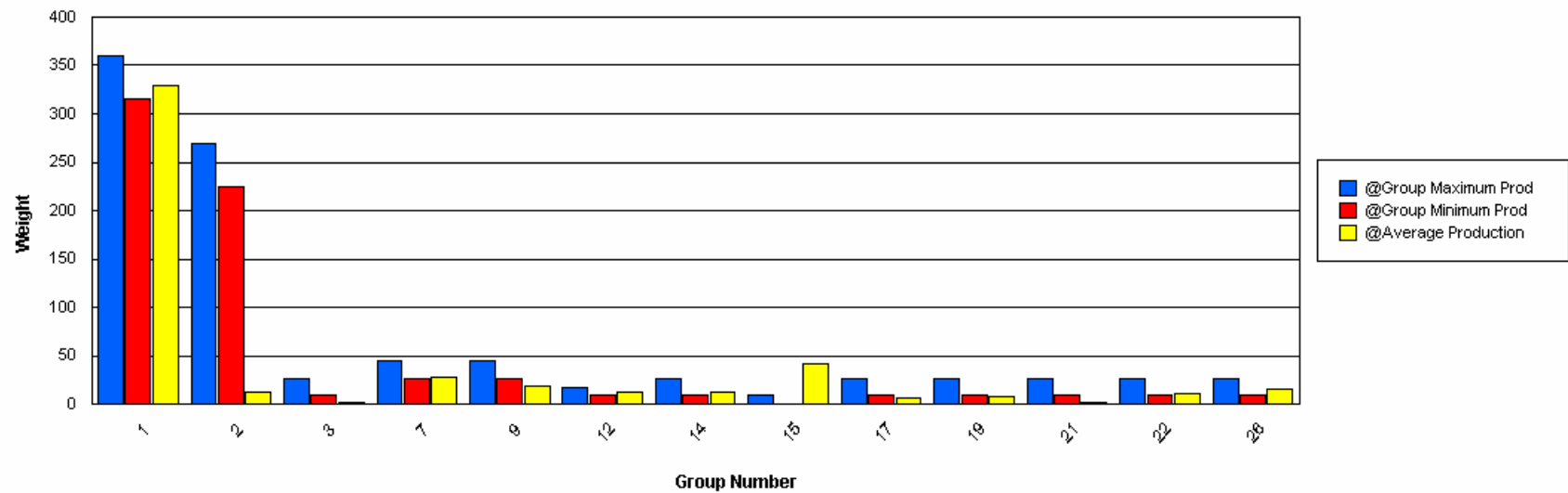
Functional / Structural Groups

Report Parameters

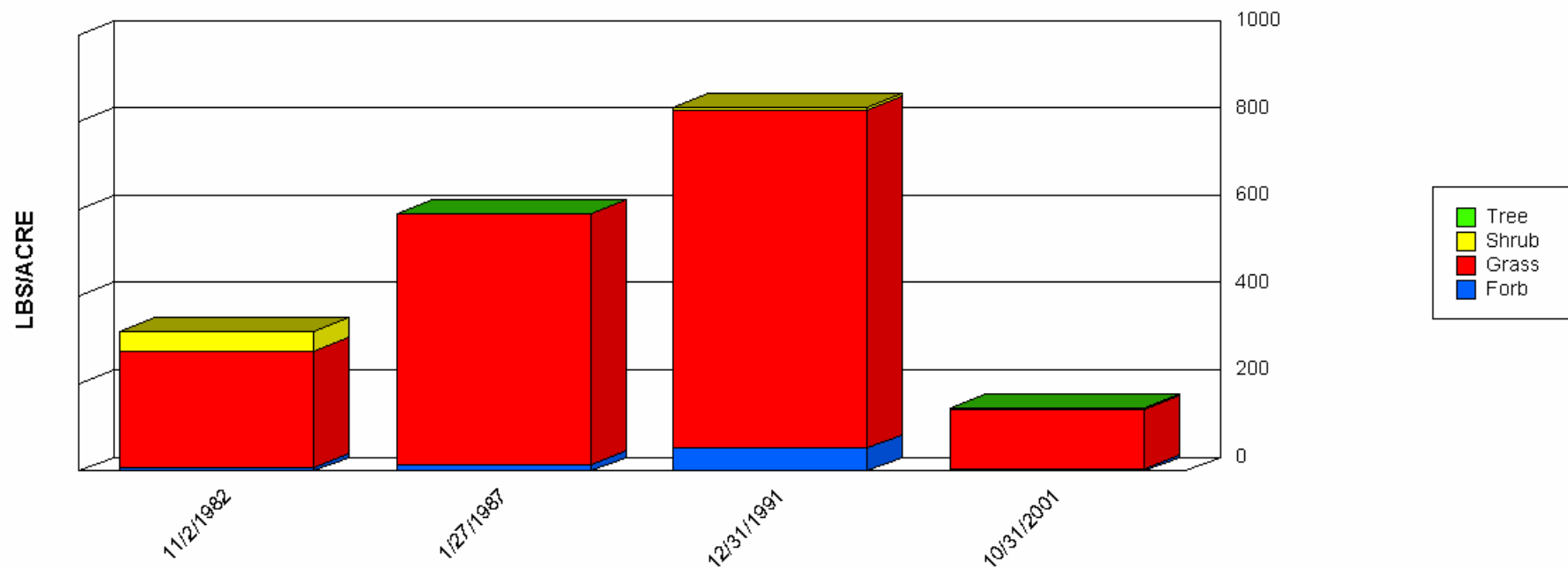
SITE NAME LIKE 64068-ROCK TANK-F054
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2002
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 042CY007NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	HIMU2	315	360	87.84	655.00	276.40	227.34
1	Grass	SCBR2	315	360	32.67	84.00	52.17	19.19
2	Grass	BOER4	225	270	0.00	14.56	7.52	5.95
2	Grass	BOGR2	225	270	0.00	9.33	4.67	4.67
3	Grass	BOCU	9	27	0.00	4.39	2.19	2.19
7	Grass	ARIST	27	45	0.00	84.28	24.79	34.50
7	Grass	SPCR	27	45	0.00	6.47	3.23	3.23
9	Grass	MUAR	27	45	0.00	20.05	11.59	7.53
9	Grass	MUAR2	27	45	0.00	14.23	6.67	5.84
12	Grass	PAHA	9	18	0.00	37.50	12.21	14.83
14	Grass	TRMU	9	27	0.00	31.62	12.06	13.95
15	Grass	TRPI2	0	9	0.00	122.00	42.00	56.59
17	Grass	ERPU8	9	27	2.00	11.33	5.78	3.42
18	Forb	SPHAE	9	27	0.00	0.73	0.24	0.35
19	Forb	CROTO	9	27	0.00	20.00	6.57	7.86
19	Forb	PENA	9	27	0.00	3.00	1.09	1.14
19	Forb	SELO	9	27	0.00	1.33	0.44	0.63
21	Forb	ERTE13	9	27	0.00	8.00	2.18	3.37
22	Forb	AAFF	9	27	0.00	21.00	10.42	8.57
24	Forb	MELE2	9	27	0.00	0.33	0.11	0.15
26	Shrub	GUSA2	9	27	0.00	40.02	13.34	18.87
26	Shrub	OPLE	9	27	0.00	0.20	0.10	0.10
26	Shrub	OPUNT	9	27	0.00	8.00	2.77	3.27
26	Tree	YUEL	9	27	0.00	0.33	0.17	0.17

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
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Production Lbs/Acre Trends

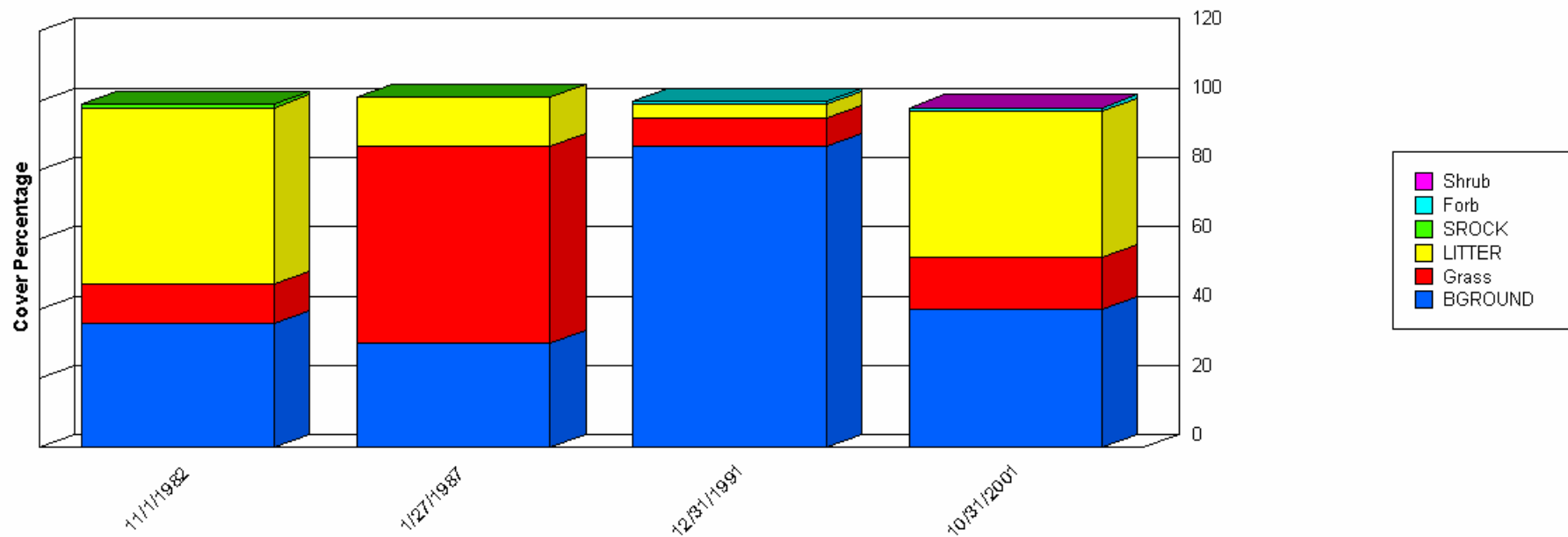


	11/2/1982	1/27/1987	12/31/1991	10/31/2001
Forb	6.89	14.13	52.00	4.80
Grass	269.11	575.83	774.00	137.77
Shrub	43.10	0.20	8.00	3.33
Tree	0.00	0.33	0.00	0.00
Total	319.09	590.50	834.00	145.91

Report Parameters

SITE NAME LIKE 64068-ROCK TANK-F054
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2002

Ground Cover Trends



	11/1/1982	1/27/1987	12/31/1991	10/31/2001
BGROUND	36.00	30.00	87.00	40.00
Forb	0.00	0.00	1.00	1.00
Grass	11.00	57.00	8.00	15.00
LITTER	51.00	14.00	4.00	42.00
Shrub	0.00	0.00	0.00	0.00
SROCK	1.00	0.00	0.00	0.00
Total	99.00	101.00	100.00	98.00

Report Parameters

SITE NAME LIKE	64068-SOUTH TRAP-F057
ON/AFTER	10/01/1982
ON/BEFORE	09/30/2002

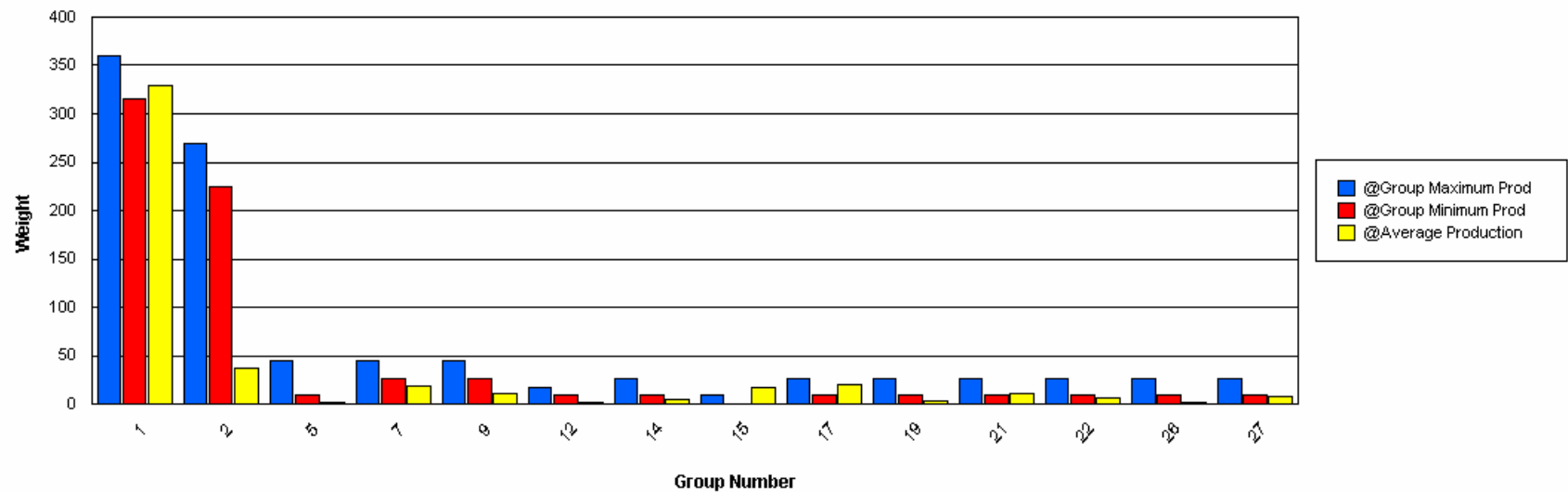
Functional / Structural Groups

Report Parameters

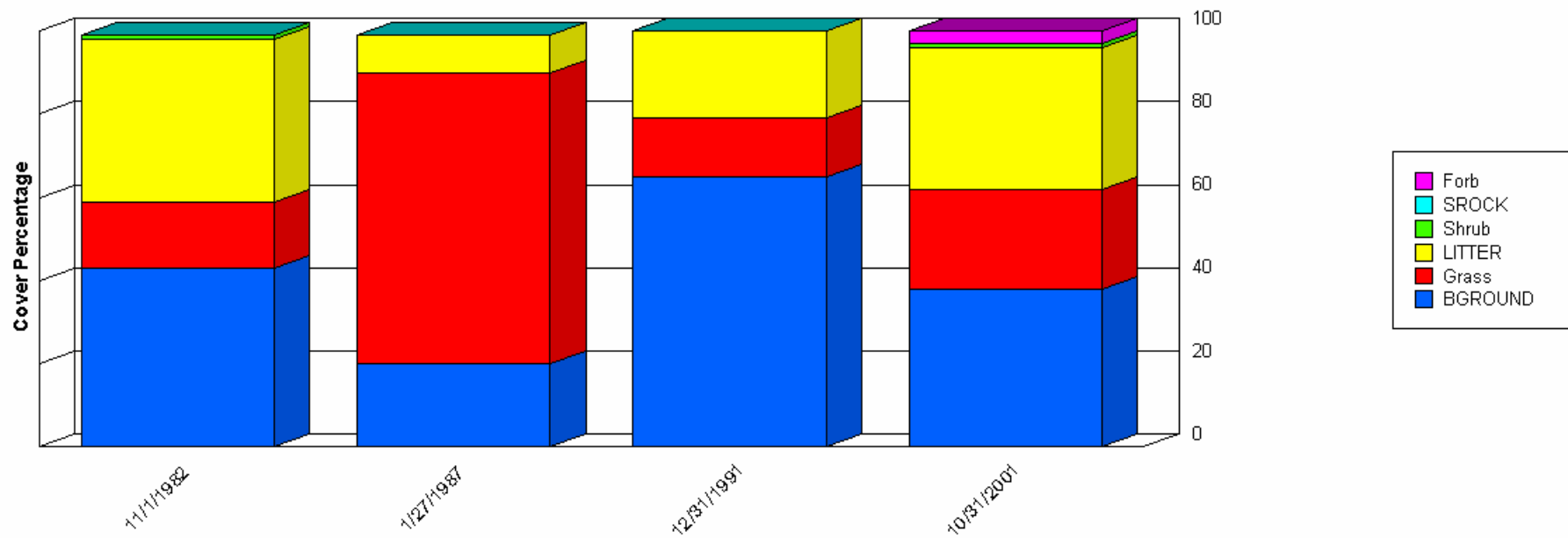
SITE NAME LIKE 64068-SOUTH TRAP-F057
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2002
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 042CY007NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	HIJA	315	360	0.00	18.80	9.40	9.40
1	Grass	HIMU2	315	360	74.88	638.00	285.48	221.13
1	Grass	SCBR2	315	360	14.47	69.19	34.15	21.18
2	Grass	BOER4	225	270	0.00	102.00	27.31	43.16
2	Grass	BOGR2	225	270	0.00	28.00	10.53	10.55
5	Grass	BOSA	9	45	0.00	3.13	1.57	1.57
7	Grass	ARIST	27	45	1.54	32.01	15.72	10.87
7	Grass	SPCR	27	45	0.00	4.37	2.68	1.92
9	Grass	MUAR	27	45	0.00	25.87	10.73	9.73
12	Grass	PAHA	9	18	0.00	3.33	1.44	1.40
14	Grass	TRMU	9	27	0.00	10.45	4.30	4.46
15	Grass	TRPI2	0	9	0.00	50.67	17.56	23.43
17	Grass	ERPU8	9	27	0.57	10.00	4.16	3.59
17	Grass	LECO	9	27	0.00	33.33	16.67	16.67
18	Forb	SPCO	9	27	0.00	0.31	0.10	0.15
19	Forb	CROTO	9	27	0.00	4.00	1.33	1.63
19	Forb	PENA	9	27	0.27	2.67	1.84	1.11
21	Forb	ERTE13	9	27	0.00	36.00	11.30	14.60
22	Forb	AAFF	9	27	0.00	16.74	6.25	7.46
24	Forb	MELE2	9	27	0.00	0.98	0.33	0.46
26	Shrub	GUSA2	9	27	0.00	5.06	1.69	2.39
26	Shrub	OPIM	9	27	0.00	2.00	1.00	1.00
27	Shrub	SENEC2	9	27	0.00	16.20	8.10	8.10

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
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Ground Cover Trends



	11/1/1982	1/27/1987	12/31/1991	10/31/2001
BGROUND	43.00	20.00	65.00	38.00
Forb	0.00	0.00	0.00	3.00
Grass	16.00	70.00	14.00	24.00
LITTER	39.00	9.00	21.00	34.00
Shrub	1.00	0.00	0.00	1.00
SROCK	0.00	0.00	0.00	0.00
Total	99.00	99.00	100.00	100.00

Report Parameters

SITE NAME LIKE	64068-SULFUR-F058
ON/AFTER	10/01/1982
ON/BEFORE	09/30/2002

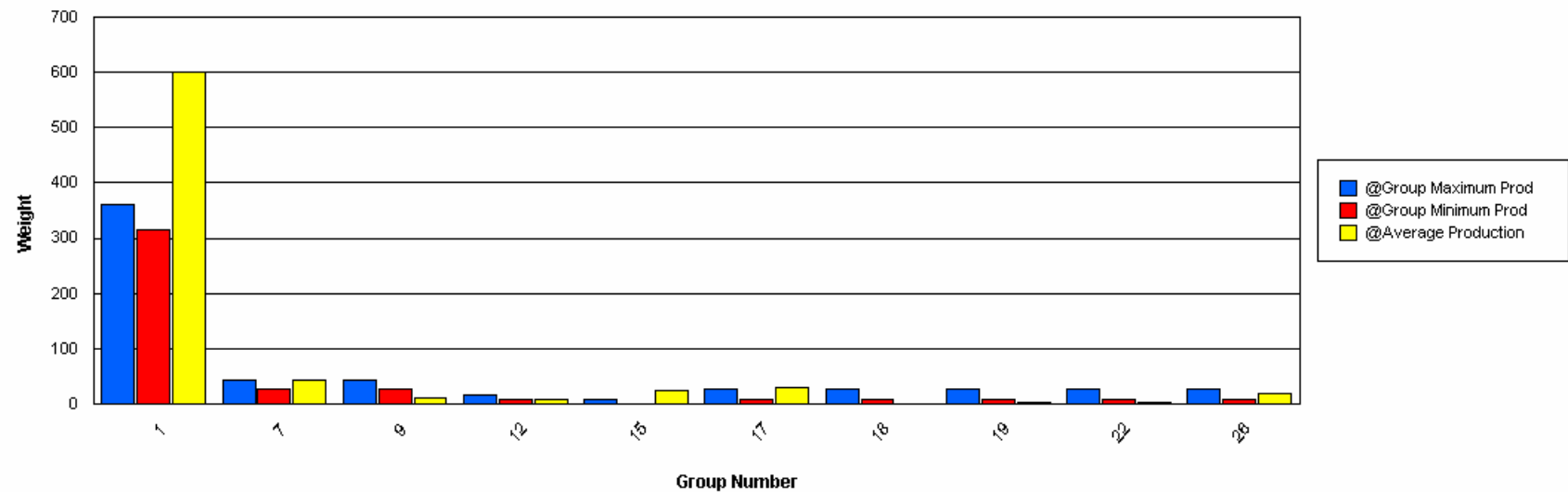
Functional / Structural Groups

Report Parameters

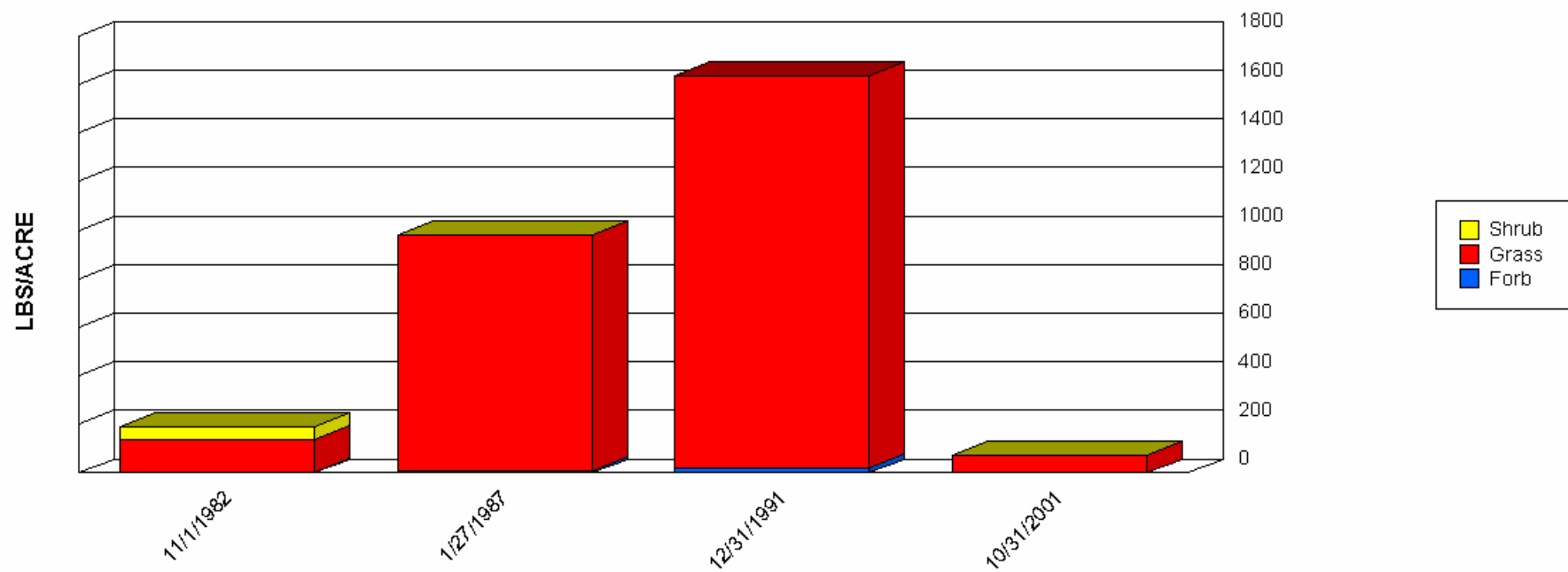
SITE NAME LIKE 64068-SULFUR-F058
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2002
 MIN LBS TO GRAPH 1
 SELECTED ECOSITE 042CY007NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	HIMU2	315	360	49.44	1,377.00	546.08	534.59
1	Grass	SCBR2	315	360	18.67	141.12	55.03	50.10
7	Grass	ARIST	27	45	1.60	115.00	44.66	46.88
9	Grass	MUAR	27	45	0.00	43.00	11.61	18.18
12	Grass	PAHA	9	18	0.00	22.00	9.56	9.21
15	Grass	TRPI2	0	9	0.00	50.67	25.34	25.34
17	Grass	LECO	9	27	0.00	60.76	30.38	30.38
18	Forb	SPHAE	9	27	0.00	6.00	1.74	2.49
19	Forb	CROTO	9	27	0.00	3.00	0.91	1.23
19	Forb	PENA	9	27	0.00	7.00	2.56	2.75
19	Forb	SELO	9	27	0.00	1.00	0.33	0.47
22	Forb	AAFF	9	27	0.00	5.00	3.29	2.32
26	Shrub	ECHIN2	9	27	0.00	0.59	0.20	0.28
26	Shrub	GUSA2	9	27	0.00	51.98	18.54	23.69

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
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Production Lbs/Acre Trends



	11/1/1982	1/27/1987	12/31/1991	10/31/2001
Forb	3.14	7.53	23.00	0.00
Grass	134.25	971.66	1,612.00	70.68
Shrub	52.57	3.64	0.00	0.00
Total	189.96	982.83	1,635.00	70.68

Report Parameters

SITE NAME LIKE 64068-SULFUR-F058
 ON/AFTER 10/01/1982
 ON/BEFORE 09/30/2002

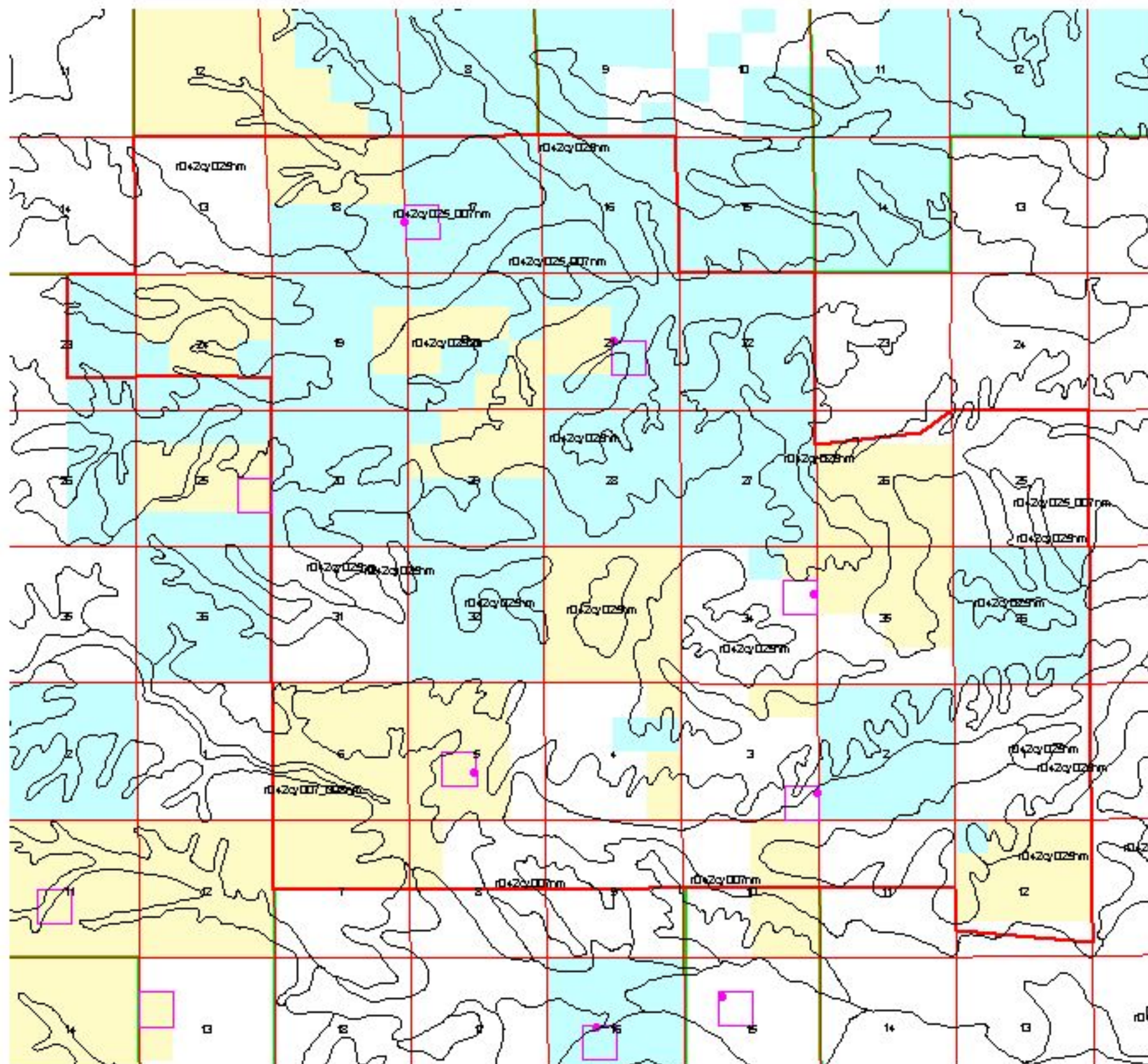


Rangeland Health Assessment Ecological Sites

Allotment 64068



T13.R22E



T14S.R23E

0.8 0 0.8 Miles



Public



Study Plots



State



Private



Study Locations



Pasture Boundary



Ecological Sites



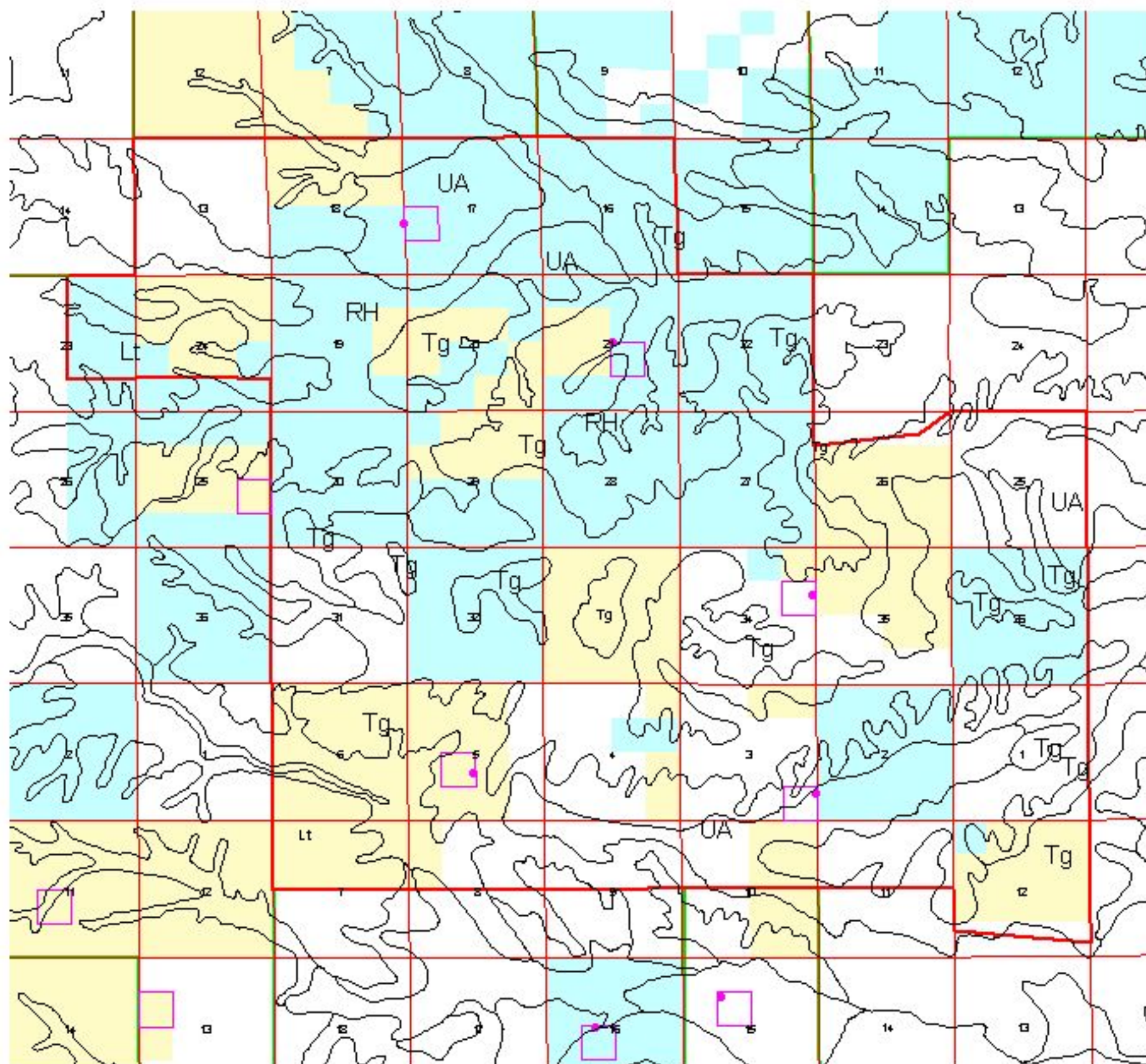
Allotment Boundary

Produced by the Roswell Field Office
GIS Intern on July 24, 2003.

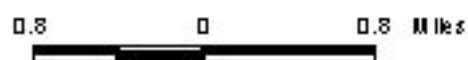
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T13.R22E



T14S.R23E



Public



Study Plots



State



Private



Study Locations



Pasture Boundary



Soil Mapping Units



Allotment Boundary

Produced by the Roswell Field Office
GIS Intern on July 24, 2003.

His membership in the Union of Latin Musicians was a life-long one, which was a great privilege. His colleagues in the Union were of various ages, and all of them were very competent and hard-working. He was a very good person, and a very good musician. He was a very good person, and a very good musician. He was a very good person, and a very good musician.